2009 HIGHWAY SAFETY IMPROVEMENT PROGRAM REPORT
(Evaluation of improvements made in State Fiscal Year FY 2009)
OHIO RAIL DEVELOPMENT COMMISSION
RAILROAD GRADE CROSSING SAFETY PROGRAMS

Purpose: The Ohio Rail Development Commission (ORDC) Railroad Grade Crossing Safety Programs provide funding for highway-railroad grade crossing safety improvements or corrective activity designed to alleviate a highway-railroad hazard. The State of Ohio has approximately 6,100 public, at-grade crossings of which 3,050 (50%) are equipped with flashing lights and roadway gates, 793 (13%) are equipped with flashing lights only and 2,318 (37%) are passive. In addition, Ohio has approximately 2,257 grade separations.

Effectiveness: The crashes occurring at public grade crossings in Ohio have shown a steady decline and leveling off since the early 1970s. The table below summarizes the progression. The State experienced a reduction in total crashes for 2008, but crashes at locations with active warning devices increased with an alarming 69% of all crashes occurring at locations with active warning devices

	Calendar Years										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
CRASHES	137	127	143	123	120	112	117	122	108	113	82
FATALITIES	14	19	15	21	20	11	13	7	15	8	11
INJURIES	42	46	40	41	36	44	32	32	30	40	31

Funding: The ORDC Railroad Grade Crossing Safety Programs are funded through the Ohio Department of Transportation (ODOT) from the Federal Highway Administration (FHWA) Highway Safety Improvement Program and Surface Transportation Program. Historically, ORDC has received $15 million per fiscal year. This amount exceeds the $8.2 million set-aside for railroad grade crossing safety in the Transportation Equity Act for the 21st Century and the Safe Accountable, Flexible Efficiency Transportation Equity Act – A Legacy for Users (SAFETEA-LU) by $6.8 million. For State FY 2009, the total expenditures in the grade crossing safety programs were $25,297,943.

State Fiscal Year 2009 Activities

INTRODUCTION

This 2009 Highway Safety Improvement Program Report will cover all expenditures made in State FY 2009 toward grade crossing safety. Of the $25,297,943 expended on grade crossing safety improvements in State FY 2009, $3,561,163 was expended specifically under 23 USC 130. Attached is a spreadsheet titled State FY 2009 – Projects Funded under 23 USC 130. This

document reflects the information available as of August, 2009. Complete documentation on these projects will be filed in the annual Highway Safety Improvement Program Report of 2012.

CROSSING APPROACH IMPROVEMENTS

Activities such as channelization, new or upgraded traffic signals and pre-signals guardrails and pedestrian / bicycle path improvements near the crossing are funded as part of individual warning device projects. These types of improvements are not specifically funded as individual projects using Federal funds administered by the ORDC. However, new or upgraded traffic signals due to preemption could be funded in the future as the ORDC and ODOT embark in a project that will study the interconnection between grade crossing warning devices and traffic control signals within close proximity of a grade crossing. Funding for these improvements will begin in FY 2010.

Historically the State of Ohio funds grade crossing illumination projects through a State funded Supplemental Assistance Program administered by the Public Utilities Commission of Ohio (PUCO).

CROSSING WARNING SIGN AND PAVEMENT MARKING IMPROVEMENTS

No specific improvements were accomplished in the area of crossing warning sign and pavement marking improvements in State FY 2009 due to the fact that advance warning signs, crossbucks and pavement markings were upgraded in 1994 at all passively-warned highway grade crossings as part of the Manual on Uniform Traffic Control Devices (MUTCD) experiment for the evaluation of the Buckeye Crossbuck. The State is in the process of developing a plan to address the installation on yield and stop signs as part of the crossbuck assembly.

ACTIVE GRADE CROSSING EQUIPMENT INSTALLATION / UPGRADE

Priority Warning Device Improvements (Original Section 130 Program)
In State FY 2009, 12 crossings were specifically identified by the Federal Railroad Administration (FRA) Hazard Index. The locations were selected on a state-wide basis.

The column titled "Effectiveness Hazard Prediction Ranking" on the attached spreadsheet indicates the statewide ranking of the crossing at the time it was selected for improvement. The ranking demonstrates a 1 to approximately 6,100 position of that specific location in comparison to all public at-grade crossings in Ohio. In this particular fiscal year, the project locations are ranked between 1 and 114. Locations between 1 and 114 that were not selected already are equipped with flashing lights and roadway gates, is an existing project identified prior to this set of projects, or a diagnostic team found the existing devices adequate. Three crossings (Main Street, Caledonia; Dog Leg Road, TR136, in Paris Township; and Washington Street in Village of Tontongony) were upgraded due to their proximity with crossings identified by hazard index.

Rail Corridor Program

In an effort to take advantage of economies of scale and the closure of redundant crossings, the State of Ohio promotes the concept of upgrading segments of rail, with multiple crossings, at one time. In FY 2009 two (2) corridors were addressed:

The first corridor addressed was the Wheeling and Lake Erie Akron Sub. This involved two (2) standard light and gate installations in the City of Akron.

The second corridor addressed was the Norfolk Southern B Line (Vermilion to Payne). This involved three (3) closures and three (3) standard light and gate installations; one of each in the Village of McComb, Washington Township and the Village of Leipsic.

Fatal Crash Upgrade Program

The Fatal Crash Upgrade Program was a new program initiated by the ORDC in 2001. When a community in Ohio experiences a fatal grade crossing crash, the ORDC immediately conducts a field review of the crossing. If the field review ultimately concludes that an engineering improvement would reduce the chance of another crash, the ORDC immediately addresses the engineering issue with a project to implement the corrective action. In FY 2009, the ORDC funded two (2) installations of flashing lights and roadway gates as a result of this program.

Grade Crossing Consolidation Program

In the Grade Crossing Consolidation Program, flexible funds providing local incentive for crossing closure are utilized. The ORDC offers a range of improvements. For example, flashing lights and roadway gates, surface reconstruction, profile improvement, and/or railroad infrastructure improvements that can benefit the highway user and/or the creation of parallel roadways, cul-de-sacs or T-turnarounds.

Over the years, crossing closures have become increasingly difficult to achieve. In 2009, the ORDC negotiated eleven (11) crossing closures. In exchange for these closures, five (5) flashing lights and roadway gate installations and one (1) lights and gates relocation project were funded.

DeWine incentive funds of $30,000 were expended in three communities with four crossing closures. These funds will be expended for highway safety improvements, including paving and wheelchair ramps, within the communities.

County Task Force/Constituent Initiated

The ORDC considers local level grass root interests in grade crossing safety a critical component of its overall program. The ORDC has assisted in the creation of approximately one dozen County Railroad Safety Task Force organizations throughout the State. In these Task Force groups, ORDC's efforts are often complemented by the work of such rail highway grade crossing safety advocacy groups as "The Angels on Track Foundation." ORDC staff is active on each of the Task Force groups and attempts to partner with local groups to fund safety projects that they prioritize. The projects funded in 2009 under this category were five (5) warning device

installations recommended by Medina County Task Force and Washington County Engineer. In addition three (3) crossings were upgraded as a result of reports received through The Angels on Track Foundation. The Angels of Track Foundation (AOT) is particularly active and uses an aggressive public service campaign to direct constituents to its website where they may report a dangerous crossing. In FY 2009, 191 AOT reports were received by the ORDC and each report is investigated in depth.

State Route System Crossing Improvement Program The ORDC desires to eliminate crossings on Ohio's State Route system that are equipped with passive signage and/or flashing light systems. The ORDC attempts to address a few of these crossings each year when funds permit. While some State and U.S. Routes were addressed in other programs, no crossings were funded as stand alone projects under this program in Fiscal Year 2009.

Signal Circuitry Upgrade
Four signal circuitry upgrades were funded with FRA Grant allocations supplemented by ORDC funds. The ORDC's ultimate goal is to equip crossings with state-of-the-art flashing lights and roadway gates. The ORDC attempts to address a few of these crossings each year when funds permit.

VISIBILITY IMPROVEMENTS

Visibility improvements are not currently funded as individual projects using Federal funds. Activities such as sight distance improvements and vegetation clearance are funded through the PUCO's state funded Supplemental Assistance Program.

ROADWAY GEOMETRY IMPROVEMENTS

Surface Reconstruction Program
The ORDC funds the installation of high-type surface material at grade crossings. The Surface Reconstruction Program primarily addresses crossings on the State Route system and is funded by a labor/material split with the operating railroad. The ORDC funds the material costs and the railroad funds the labor portion of the project. In 2009, the ORDC funded two (2) projects in this manner. Over $4M was expended for turnout and switch improvements for the CSX Transportation North Baltimore Intermodal Facility under this program. These improvements will allow trains which would normally move slowly and block multiple crossings to move swiftly through the crossings.

Profile Improvement
Activities such as sight distance improvement and elimination of high-profile ("humped") crossings are funded as part of the Supplemental Assistance Program through the PUCO.

GRADE CROSSING ELIMINATION

Grade Crossing Consolidation Program

In the Grade Crossing Consolidation Program, flexible funds providing local incentive for crossing closures are utilized. The ORDC offers a range of incentives. For example, flashing light with roadway gates installation, surface reconstruction, profile improvement, railroad infrastructure improvements that can benefit the highway user, the creation of parallel roadways and cul-de-sacs.

In 1999, the State of Ohio began the Rail Grade Separation Program developed under the direction of Governor Taft. This program is a 10-year, $200 million program led by the Ohio Department of Transportation (ODOT) and the Ohio Rail Development Commission (ORDC). Annually, from 2001 through 2010, the ORDC will commit $2 million to this program. The program will address safety, mobility and economic development concerns from Ohio's local communities and elected leaders. The program is intended to address a minimum of 30 crossings during its 10 year duration. Detailed information on this program can be found at http://www.dot.state.oh.us/rgsp/.Specifically, in 2009, the ORDC closed eleven (11) crossings. In exchange for these closures, four (4) flashing lights and roadway gate installations and one (1) light and gate relocation project were funded. In addition, turnout and switch improvements were funded to enhance safety in the vicinity of the CSX Transportation North Baltimore Intermodal Facility. The table below summarizes the past ten (10) Fiscal Year's closures:

FISCAL YEAR	Number of Closures
1999	24
2000	5
2001	28
2002	5
2003	6
2004	6
2005	3
2006	9
2007	20
2008	4
2009	11
Total	**121**

GRADE CROSSING INVENTORY UPDATE

In FY 1999, the ORDC funded the creation of a State of Ohio Grade Crossing Inventory Database. This online tool allows anyone with Internet access to view photographs of the actual crossings as well as query relevant data about the crossing. The PUCO is charged by the Ohio Revised Code (ORC) to maintain the Grade Crossing Inventory for the State of Ohio.

The data is updated to reflect warning devices improvements and/or modifications made by the State of Ohio. To ensure this, the ORDC requires that photographs be taken at the final inspection of each federally funded project and ORDC staff enters these photographs along with updated information about the warning devices into the database. In addition, the ORDC continues to collect information related to railroad data from Ohio's carriers. Some updates are the result of the investigation of constituent reports from the Angels on Track Foundation. Occasionally investigations disclose inaccuracies in the inventory data which is subsequently corrected. These efforts require no specific expenditure of funds.

AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) PROJECTS

In Fiscal Year 2009 $7,046,923 was awarded from ARRA funds for rail safety projects. Nine (9) projects involving twenty (20) light and gate installations, two resurfacing projects, circuitry and railroad warning device/traffic signal interconnection improvement will be funded from these ARRA funds. These projects will be complete by September 2012.

PROJECT	Detail
Summit County, City of Macedonia	Summit County, Macedonia, Twinsburg Road, AAR DOT # 503033D, NS
Columbiana County, Village of Minerva	US30, AAR DOT # 503455W
Southgate Industrial Park, Surface Reconstruction, LIC SR79	Licking County, SR79, N. Cedar Street, AAR DOT # 517478U
Van Wert/Allen County, City of Delphos	S. Pierce St., AAR DOT # 532743U S. Franklin St., AAR DOT # 532744B SR66, S. Main St., AAR DOT # 532745H Bredeick St., AAR DOT # 532749K SR697, AAR DOT # 532750E
Lorain County, City of North Ridgeville	Chestnut Ridge AAR DOT # 523 844G Root Rd. AAR DOT # 523 845N Maddock Rd. AAR DOT # 523 847C Race Rd. AAR DOT # 523 848J
NS Railroad Grade Crossing Safety Upgrades Montgomery and Warren Counties	Sellars Rd., AAR DOT # 524638X Alex Bell Rd., AAR DOT # 524641F Alex Rd., AAR DOT # 524644B Elm St., AAR DOT # 524645H Fairview Rd., AAR DOT # 524664M Lower Carlisle Rd., AAR DOT # 524667H

PROJECT	Detail
Statewide Railroad Crossing Preemption Project	Statewide Signal Preemption
Stark County, City of Hartville and Surrounding Area	Three (3) W&LE Grade Crossings: POR, TR2, Manning Rd., AAR DOT # 472632K STA, SR619, Maple St., AAR DOT # 472624 T STA, CR56, N. Prospect Ave., AAR DOT # 472625A
Wayne County, Smithville to Orrville	Five (5) W&LE Grade Crossings: TR145, Chippewa Rd., AAR DOT # 473186W TR216, Egypt Rd., AAR DOT # 473191T TR335, Leichty Rd., AAR DOT # 473192A TR226, Northeast St., AAR DOT # 473196C TR216, Paradise Rd., AAR DOT # 473188K

OTHER FUNDS

In addition to ORDC and ARRA funds, the ORDC administered $2,015,950.00 in funds from one (1) Congressional Set-Aside and two Federal Railroad Administration (FRA) grants. These funds resulted in eight (8) light and gate installations and one (1) crossing closure.

Summary of Fiscal Year 2009 Activities

The following table outlines the funds expended in Fiscal Year 2009 on actual projects. Change orders are not included in this Table. This data will be fully reported in the Highway Safety Improvement Program Report submitted in June, 2011.

Category	Number of Crossings	Cost	Functional Class	
Active Grade Crossing Equipment Installation/Upgrade	63	$14,519,355	FC2 = 2 FC6 = 1 FC7 = 4 FC8 =1	FC9 = 20 FC16 = 7 FC17 = 3 FC19 = 25
Roadway Geometry Improvements	2	$5,528,588	FC2 = 1	FC16 = 1
Grade Crossing Elimination	11 closures 1 grade separation	$5,250,000	FC8 = 1 FC9 = 4	FC16 = 1 FC19 = 5

01 Rural Interstate
02 Rural Principal Arterial
06 Rural Minor Arterial
07 Rural Major Collector
08 Rural Minor Collector
09 Rural Local

11 Urban Interstate
12 Urban Other Freeway & Expressways
14 Urban Other Principal Arterial
16 Urban Minor Arterial
17 Urban Collector
19 Urban Local

PROJECT METRICS

Evaluation of projects funded under 23 USC 130 for State FY 2006 is attached on a spreadsheet titled "FY 2006 – Projects Funded under 23 USC 130."

CONCLUSION

For State FY 2010, the ORDC plans to continue conducting Grade Safety Programs in the same manner focusing improvements at the most hazardous crossings utilizing the most cost-effective measures. It is becoming increasing common for individual projects to cost massive amounts of money, from as much as $400,000 to $1M. Some of this is due to increased cost of labor and material, and some is due technological advancements and new safety technology. The ORDC continues to focus on partnerships with other government agencies and private industry to arrive at mutually advantageous funding solutions to enhance safety at grade crossings within our communities.

State FY 2009 - Projects Funded Under 23 USC 130

Federal Funding Level in FY 2009 = $25,297,943, 63 Flashing Lights with Roadway Gate Installations, 11 Crossings Closed, 2 Surface Reconstruction Projects, 1 grade separation								EFFECTIVENESS HAZARD PREDICTION RANKING (1/6,100)		CRASH DATA BEFORE															
										2004			2005			2006			2007			2008		
Federal-Aid Project Number	COUNTY	ROUTE (LHA)	US DOT #	FHWA Roadway Functional Classification	Project Type and Description	Crossing Protection	OBLIGATED PROJECT COST/ORDC ESTIMATE TO DATE	Before	After**	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO
E090(095)	ALL	Main Street (Village of Cairo)	155699U	7	Active Grade Crossing Equipment Installation/Upgrade	Passive	$412,157.00	42													1			
E090(825)	ATB	US 6-18.97	503124J	7		Active/ Flashing Lights	$244,526.38	73															1	
E090(265)	CHP	Thackery Rd, CR 79	258740V	7		Passive	$187,994.15	81																
E090(301)	CUY	McCracken Rd. (City of Garfield Heights)	524232N	17		Active/ Lights & Gates	$550,000.00	6				1											1	1
E090(694)	MAR	High Street (Village of Caledonia)	262056S	19		Passive	$238,207.00	108							1									
E090(693)	MAR	Main Street (Village of Caledonia)	262055K	19		Active/ Flashing Lights	$274,818.00	N/A																
E090(697)	MRW	Marion-Johnsonville Rd, TR59 (Washington Twp.)	518336G	9		Passive	$162,924.00	60															3	
E090(191)	PUT	TR P9 (Pleasant Twp.)	155713M	9		Passive	$191,719.00	79																1
E090(696)	UNI	Dog Leg Rd, TR 136 (Paris Twp.)	513818P	9		Passive	$178,453.00	N/A																
E090(695)	UNI	Westlake-Lee, CR 137	513817H	9		Passive	$170,364.00	114							1									

State FY 2009 - Projects Funded Under 23 USC 130

Federal Funding Level in FY 2009 = $25,297,943, 63 Flashing Lights with Roadway Gate Installations, 11 Crossings Closed, 2 Surface Reconstruction Projects, 1 grade separation								EFFECTIVENESS HAZARD PREDICTION RANKING (1/6,100)		CRASH DATA BEFORE															
										2004			2005			2006			2007			2008		
Federal-Aid Project Number	COUNTY	ROUTE (LHA)	US DOT #	FHWA Roadway Functional Classification	Project Type and Description	Crossing Protection	OBLIGATED PROJECT COST/ORDC ESTIMATE TO DATE	Before	After**	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO
E090(096)	UNI	Hoover-Bault Rd, CR 219	513806V	9	Active Grade Crossing Equipment Installation/Upgrade	Passive	$190,000.00	70																	1
E090(266)	WAR	Main Street (City of Mason)	525235M	19		Passive	$190,000.00	43						1											1
E090(930)	WOO	Hull Prairie Rd, TR 97 (Middleton Twp.)	155811D	8		Passive	$190,000.00	99									1	1							
E090(939)	WOO	Lincoln Street (Village of Tontogony)	155795W	19		Passive	$380,000.00	107												1					
	WOO	Washington Street (Village of Tontogony)	155798S	19		Passive		N/A												1					

PDO - Property Damage Only

*Cost Estimate Final Bill Not yet received.

**Ranking/After - Not available until projects constructed.

$3,561,162.53 divided by 15 = $237,410.84 Average Project Cost

State FY 2006 - Projects Funded Under 23 USC 130

Federal Funding Level in FY 2006 = $18,982,868.00 68 Flashing Lights with Roadway Gate Installations, 9 Crossings Closed, 37 Surface Reconstruction Projects							EFFECTIVENESS HAZARD PREDICTION RANKING (1/6,100)		CRASH DATA BEFORE	CRASH DATA AFTER											
									1/1/2002 - 3/31/2006*	4/1-12/31 2006			2007			2008			2009		
Federal-Aid Project Number	COUNTY	ROUTE/LHA	US DOT #	FHWA Roadway Functional Classification	Project Type and Description	Crossing Protection	TOTAL PROJECT COST	Before	After**	*Total Number of Crashes (as reported on the Diagnostic Review Forms) - Crash data by year no longer available	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO
E060(062)	ALL	CR 84, State Road Allen County	532736J	8	Active Grade Crossing Equipment Installation/Upgrade	Passive	$81,856.47	238	4706														
E060(037)	AUG	CR 100, Sante Fe-New Knoxville Road Auglaize County	258649C	9		Passive	$153,475.24	37	783	2													
E060(036)	BUT	Hensley Avenue City of Hamilton	524977C	19		Active/ FL-LTS only	$130,293.87	86	237				1*										
E060(035)	DAR	Detling Road, Brown Township	538808F	9		Passive	$292,414.05	87	3689	1													
E060(039)	ERI	Stanley Road Vermilion Township	472316M	9		Passive	$129,069.02	89	3933	1													
E051(210)	HEN	Marion Street Village of Deshler	155753K	19		Passive	$266,016.63	75	3326	1													
E051(211)	HEN	Mulberry Street Village of Desher	155754S	19		Passive	$268,510.97	44	2545	1													
E051(208)	HEN	Elm Street Village of Deshler	155759B	19		Passive	$173,786.39	64	294	1													

State FY 2006 - Projects Funded Under 23 USC 130

Federal Funding Level in FY 2006 = $18,982,868.00 68 Flashing Lights with Roadway Gate Installations, 9 Crossings Closed, 37 Surface Reconstruction Projects								EFFECTIVENESS HAZARD PREDICTION RANKING (1/6,100)		CRASH DATA BEFORE	CRASH DATA AFTER											
										1/1/2002 - 3/31/2006*	4/1-12/31 2006			2007			2008			2009		
Federal-Aid Project Number	COUNTY	ROUTE/LHA	US DOT #	FHWA Roadway Functional Classification	Project Type and Description	Crossing Protection	TOTAL PROJECT COST	Before	After**	*Total Number of Crashes (as reported on the Diagnostic Review Forms) - Crash data by year no longer available	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO
E060 (063)	KNO	SR 36, High Street City of Mt. Vernon	152074L	14	Active Grade Crossing Equipment Installation/Upgrade	Active/ FL-LTS only	$605,567.05	71	3343													
	KNO	Chestnut Street City of Mt. Vernon	152075T	19		Active/ FL-LTS only		N/A	N/A													
	KNO	Vine Street City of Mt. Vernon	152073E	19		Active/ FL-LTS only		N/A	N/A													
	KNO	Gambier Street City of Mt. Vernon	152072X	19		Active/ FL-LTS only		N/A	N/A													
E060(066)	LUC	Erie Street City of Toledo	867099J	19		Active/ FL-LTS only	$329,383.72	N/A	N/A	1												1
E060(065)	LUC	Wheeling Street City of Toledo	851539A	19		Passive	$144,961.34	41	4484	2												
E060(040)	MAD	CR 70, Glade Run Road Madison County	525135H	9		Passive	$146,315.48	56	510	1												
E060(052)	MED	Smith Road City of Medina	002080C	16		Passive	$161,748.03	55	424	2												
E060(053)	MED	CR 45, Spencer Lake Road Medina County	002054M	9		Passive	$141,871.22	6	274	4												
E060(042)	RIC	Malone Road Cass Township	518474V	9		Passive	$123,858.16	16	635	2												

State FY 2006 - Projects Funded Under 23 USC 130

Federal Funding Level in FY 2006 = $18,982,868.00 68 Flashing Lights with Roadway Gate Installations, 9 Crossings Closed, 37 Surface Reconstruction Projects							EFFECTIVENESS HAZARD PREDICTION RANKING (1/6,100)		CRASH DATA BEFORE	CRASH DATA AFTER												
									1/1/2002 - 3/31/2006*	4/1-12/31 2006			2007			2008			2009			
Federal-Aid Project Number	COUNTY	ROUTE/LHA	US DOT #	FHWA Roadway Functional Classification	Project Type and Description	Crossing Protection	TOTAL PROJECT COST	Before	After**	*Total Number of Crashes (as reported on the Diagnostic Review Forms) - Crash data by year no longer available	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO
E060 (068)	SAN	Stone Street City of Fremont	510245Y	16	Active Grade Crossing Equipment Installation/Upgrade	Passive	$314,822.76	80	3811	1												
	SAN	US 20, State Street City of Fremont	510246F	14		Active/ FL-LTS only		N/A	2,714													
E060(034)	SHE	State Street Village of Botkins	155256H	8		Active/ FL-LTS only	$185,735.32	39	152	1												
E060(041)	UNI	CR33, Taylor Road Union County	513300G	9		Passive	$122,903.88	79	434	2												
E050(054)	WAY	Steiner Road Milton Township	473529B	9		Passive	$157,427.68	141	690	1												
E051(212)	WOO	TR 100, King Road Village of Haskins	155808V	9		Passive	$166,088.00	8	2650	4												
						Total	$4,096,105.28															

*crash prior to construction

PDO - Property Damage Only

*Obligated Project Costs for DOT # 002080C, 002054M, 155256H, 473529B = Material Costs Only

**Ranking/After - Takes into consideration all crash data available at time of calculation.

$4,096,105.28 divided by 24 = $170,671.05 Average Project Cost

State FY 2006 - Projects Funded Under 23 USC 130

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										1/1/2002 - 3/31/2006*	4/1-12/31 2006			2007			2008			2009		
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E060 (063)	KNO	SR 36, High Street City of Mt. Vernon	152074L	14	Active Grade Crossing Equipment Installation/Upgrade	Active/ FL-LTS only	$605,567.05	71	3343													
	KNO	Chestnut Street City of Mt. Vernon	152075T	19		Active/ FL-LTS only		N/A	N/A													
	KNO	Vine Street City of Mt. Vernon	152073E	19		Active/ FL-LTS only		N/A	N/A													
	KNO	Gambier Street City of Mt. Vernon	152072X	19		Active/ FL-LTS only		N/A	N/A													
E060(066)	LUC	Erie Street City of Toledo	867099J	19		Active/ FL-LTS only	$329,383.72	N/A	N/A	1												1
E060(065)	LUC	Wheeling Street City of Toledo	851539A	19		Passive	$144,961.34	41	4484	2												
E060(040)	MAD	CR 70, Glade Run Road Madison County	525135H	9		Passive	$146,315.48	56	510	1												
E060(052)	MED	Smith Road City of Medina	002080C	16		Passive	$161,748.03	55	424	2												
E060(053)	MED	CR 45, Spencer Lake Road Medina County	002054M	9		Passive	$141,871.22	6	274	4												
E060(042)	RIC	Malone Road Cass Township	518474V	9		Passive	$123,858.16	16	635	2												

State FY 2006 - Projects Funded Under 23 USC 130

Federal Funding Level in FY 2006 = $18,982,868.00 68 Flashing Lights with Roadway Gate Installations, 9 Crossings Closed, 37 Surface Reconstruction Projects								EFFECTIVENESS HAZARD PREDICTION RANKING (1/6,100)		CRASH DATA BEFORE	CRASH DATA AFTER											
										1/1/2002 - 3/31/2006*	4/1-12/31 2006			2007			2008			2009		
Federal-Aid Project Number	COUNTY	ROUTE/LHA	US DOT #	FHWA Roadway Functional Classification	Project Type and Description	Crossing Protection	TOTAL PROJECT COST	Before	After**	*Total Number of Crashes (as reported on the Diagnostic Review Forms) - Crash data by year no longer available	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO
E060 (068)	SAN	Stone Street City of Fremont	510245Y	16	Active Grade Crossing Equipment Installation/Upgrade	Passive	$314,822.76	80	3811	1												
	SAN	US 20, State Street City of Fremont	510246F	14		Active/ FL-LTS only		N/A	2,714													
E060(034)	SHE	State Street Village of Botkins	155256H	8		Active/ FL-LTS only	$185,735.32	39	152	1												
E060(041)	UNI	CR33, Taylor Road Union County	513300G	9		Passive	$122,903.88	79	434	2												
E050(054)	WAY	Steiner Road Milton Township	473529B	9		Passive	$157,427.68	141	690	1												
E051(212)	WOO	TR 100, King Road Village of Haskins	155808V	9		Passive	$166,088.00	8	2650	4												
													*crash prior to construction									
						Total	$4,096,105.28															

PDO - Property Damage Only

*Obligated Project Costs for DOT # 002080C, 002054M, 155256H, 473529B = Material Costs Only

**Ranking/After - Takes into consideration all crash data available at time of calculation.

$4,096,105.28 divided by 24 = $170,671.05 Average Project Cost

State FY 2009 - Projects Funded Under 23 USC 130

Federal Funding Level in FY 2009 = $25,297,943, 63 Flashing Lights with Roadway Gate Installations, 11 Crossings Closed, 2 Surface Reconstruction Projects, 1 grade separation								EFFECTIVENESS HAZARD PREDICTION RANKING (1/6,100)		CRASH DATA BEFORE															
										2004			2005			2006			2007			2008		
Federal-Aid Project Number	COUNTY	ROUTE (LHA)	US DOT #	FHWA Roadway Functional Classification	Project Type and Description	Crossing Protection	OBLIGATED PROJECT COST/ORDC ESTIMATE TO DATE	Before	After***	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO
E090(095)	ALL	Main Street (Village of Cairo)	155699U	7	Active Grade Crossing Equipment Installation/Upgrade	Passive	$412,157.00	42													1			
E090(825)	ATB	US 6-18.97	503124J	7		Active/ Flashing Lights	$244,526.38	73															1	
E090(265)	CHP	Thackery Rd, CR 79	258740V	7		Passive	$187,994.15	81																
E090(301)	CUY	McCracken Rd. (City of Garfield Heights)	524232N	17		Active/ Lights & Gates	$550,000.00	6				1											1	1
E090(694)	MAR	High Street (Village of Caledonia)	262056S	19		Passive	$238,207.00	108							1									
E090(693)	MAR	Main Street (Village of Caledonia)	262055K	19		Active/ Flashing Lights	$274,818.00	N/A																
E090(697)	MRW	Marion-Johnsonville Rd, TR59 (Washington Twp.)	518336G	9		Passive	$162,924.00	60															3	
E090(191)	PUT	TR P9 (Pleasant Twp.)	155713M	9		Passive	$191,719.00	79																1
E090(696)	UNI	Dog Leg Rd, TR 136 (Paris Twp.)	513818P	9		Passive	$178,453.00	N/A																
E090(695)	UNI	Westlake-Lee, CR 137	513817H	9		Passive	$170,364.00	114							1									

State FY 2009 - Projects Funded Under 23 USC 130

Federal Funding Level in FY 2009 = $25,297,943, 63 Flashing Lights with Roadway Gate Installations, 11 Crossings Closed, 2 Surface Reconstruction Projects, 1 grade separation								EFFECTIVENESS HAZARD PREDICTION RANKING (1/6,100)		CRASH DATA BEFORE															
										2004			2005			2006			2007			2008		
Federal-Aid Project Number	COUNTY	ROUTE (LHA)	US DOT #	FHWA Roadway Functional Classification	Project Type and Description	Crossing Protection	OBLIGATED PROJECT COST/ORDC ESTIMATE TO DATE	Before	After**	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO	FATAL	INJURY	PDO
E090(096)	UNI	Hoover-Bault Rd, CR 219	513806V	9	Active Grade Crossing Equipment Installation/Upgrade	Passive	$190,000.00	70																	1
E090(266)	WAR	Main Street (City of Mason)	525235M	19		Passive	$190,000.00	43						1											1
E090(930)	WOO	Hull Prairie Rd, TR 97 (Middleton Twp.)	155811D	8		Passive	$190,000.00	99									1	1							
E090(939)	WOO	Lincoln Street (Village of Tontogony)	155795W	19		Passive	$380,000.00	107												1					
	WOO	Washington Street (Village of Tontogony)	155798S	19		Passive		N/A												1					

PDO - Property Damage Only

*Cost Estimate Final Bill Not yet received.

**Ranking/After - Not available until projects constructed.

$3,561,162.53 divided by 15 = $237,410.84 Average Project Cost